IN THE SPECIFICATION

Please amend the paragraph beginning at page 2, line 8, and ending at page 3, line 3, as follows.

Fig. 1 is a schematic view showing the structure of a mask with a pellicle. A pellicle structure 24 is generally attached to the pattern surface side of a mask 23 through a pellicle support frame 25 with an adhesive or the like. The pellicle structure 24 comprises the pellicle support frame 25 arranged to surround a pattern formed on the mask 23, and a pellicle film (or pellicle plate; in this specification, a pellicle film or pellicle plate is generically called a pellicle) 26 which is attached to one end face of the pellicle support frame 25 and has high transmittance with respect to exposure light. When a space (to be referred to as a pellicle space) enclosed with the pellicle structure 24 and mask 23 is completely sealed, the pellicle 26 may expand or contract. To solve this problem, a vent hole 27 is provided in the pellicle support frame 25 so as to prevent occurrence of a difference in atmospheric pressure between the inside and outside of the pellicle space. A dustproof filter (not shown) is also provided in the vent hole 27 or its entrance or exit to prevent ~~a~~ foreign matter from entering the pellicle space from the vent hole 27.

Please amend the paragraph beginning at page 3, line 4, and ending at line 14, as follows.

A manufacturing process of a semiconductor device formed with an ultramicropattern such as an LSI or VLSI employs a reduction projection exposure apparatus which prints by reduction projection a circuit pattern formed on a photomask onto a wafer coated with a resist. Along with an increase in packing density of semiconductor elements, demands for further micropatterning of a circuit pattern ~~has been~~ have arisen. As a resist process develops, further miniaturization of the exposure line width has been demanded for an exposure apparatus.

Please amend the paragraph beginning at page 4, line 22, and ending at page 5, line 4, as follows.

To prevent this, a purge mechanism using inert gas such as nitrogen suppresses to a low level of several ppm order or less the oxygen concentration in the optical path of the exposure optical system of a projection exposure apparatus using far ultraviolet rays, particularly, an ArF excimer laser with a wavelength around 193 nm or a fluorine (F_2) excimer laser with an oscillation wavelength around 157 nm as a light source. This also applies to moisture, which must be removed to the ppm order or less.

Please amend the paragraph beginning at page 7, line 22, and ending at page 8, line 10, as follows.

As described above, an exposure apparatus using ultraviolet rays, particularly, an ArF excimer laser or a fluorine (F_2) excimer laser suffers from large absorption of the ArF excimer laser or fluorine (F_2) excimer laser of its wavelength by oxygen and moisture. To obtain a sufficient transmittance and stability of ultraviolet rays, the oxygen and moisture concentrations must be reduced and controlled strictly. For this purpose, a load-lock mechanism is arranged at a coupling portion between the inside and outside of the exposure apparatus. When a reticle or wafer is to be externally loaded into the exposure apparatus, the load-lock mechanism is temporarily shielded from outside air. After the impurity in the load-lock mechanism is purged with inert gas, the reticle or wafer is loaded into the exposure apparatus.

Please amend the paragraph beginning at page 9, line 5, and ending at line 12, as follows.

To increase the gas purge efficiency in a pellicle space, there is proposed a method of actively purging a pellicle with gas in, e.g., Japanese Patent Laid-Open Nos. 2001-133960 and 2001-133961. A gas purge station which actively purges the pellicle space with gas is preferably provided in at least one place such as the load-lock 13, reticle stocker 18, or the ~~like~~ like, shown in Fig. 2.

Please amend the paragraph beginning at page 9, line 13, and ending at line 27, as follows.

Assume that a vent hole is formed in a pellicle support frame, and a pellicle space is temporarily filled and sealed with inert gas of ppm order. If the oxygen concentration in a space where a reticle with a pellicle is set while being transported into a reticle stocker or while being stocked in the reticle stocker after exposure is higher than that in the pellicle space, oxygen enters the pellicle space through a vent hole. Thus, it is very difficult to maintain the oxygen concentration in the ppm order. If the reticle with the pellicle is temporarily transported outside a load-lock and is reloaded into the load-lock, the oxygen concentration of the atmosphere in the pellicle space becomes a % order, and a long time is required to purge the pellicle space again.

Please amend the paragraph beginning at page 10, line 27, and ending at page 11, line 23, as follows.

In Japanese Patent Laid-Open No. 2001-500669, there is proposed a process of purging an SMIF pod with inert gas to control the humidity and contents of oxygen and ~~a~~ particulate matter (foreign matter) to a low level. Although the proposal is intended for a wafer SMIF pod, an SMIF pod which accommodates a reticle is also preferably purged with inert gas. This is because if sulfuric acid, ammonia, or the ~~like~~ <u>like,</u> is present on a chromium surface (a circuit pattern is made from chromium) or glass surface of the reticle, it may react with oxygen contained in air due to exposure energy to cause fogging and may pass through a pellicle. In this case, in Fig. 2, a reticle transport area (transport space) between the SMIF pod 20 and the load-lock 13 is not purged with gas, and oxygen enters a pellicle space through a vent hole formed in a pellicle support frame during the transport of the reticle by the reticle hand 16 due to the difference in atmospheric pressure or oxygen concentration between the inside and outside of the pellicle space. This changes the oxygen concentration in the pellicle space to <u>the</u> % order. Under ~~the~~ <u>these</u> circumstances, the pellicle space needs to be purged again, and thus a long purge time is required, which is inefficient.

Please amend the paragraph beginning at page 29, line 22, and ending at page 30, line 14, as follows.

As described above, according to this embodiment, each reticle hand is arranged to use some (first vent holes) of the plurality of vent holes 27 formed in the reticle 30 with the pellicle to supply gas into the pellicle space 29, and use the remaining ones (second vent holes) to suck the gas from the pellicle space 29. With this arrangement, the pellicle space 29 can efficiently be purged while transporting the reticle 30 with the pellicle. When the pellicle space 29 is purged concurrently with the reticle transport, for example, the purge time in a purge station which can be arranged in a load-lock 13 or reticle stocker 18 can be shortened in consideration of a part purged by the reticle hand. Additionally, even if the reticle with the pellicle passes through a reticle transport area whose oxygen concentration and moisture concentration are low during transport, the oxygen concentration and moisture concentration are unlikely to increase. Thus, the productivity of an exposure apparatus can be increased.